

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : CANON INC

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(72)Inventor : KUMATORIYA AKIHIKO

(54) IMAGE READER

(57)Abstract:

PROBLEM TO BE SOLVED: To attain image reading with high image quality utilizing the directivity characteristic by providing plural light sources and light guide means and arranging the plural light sources at part of the light guide means in response to the directivity characteristic of the light sources.

SOLUTION: LED packages 71, 73 are arranged side by side and LED packages 72, 74 are arranged side by side respectively. As a result, LED chip 31 (32) emitting color light R and LED chip 33 (34) emitting color light G are arranged side by side and an LED chip 35 (36) emitting color light B is arranged apart a little from them on LED boards. The lighting/extinction of the LED chips 31-36 on the LED boards 40, 41 is controlled at independent

timing for each of the R, G, B light emission. A light guide section 5 has the boards 40, 41 at both ends. Then the LED chip 31 (32) with weak directivity and having a long wavelength is arranged at a remotest position with respect to a reflection section 6 of a light transmission light source so as to optimize the arrangement of the LED chips taking the light emission directivity characteristic of them into account.

